

AMENDMENTS TO THE CLAIMS

1. (original) A computer-implemented method of displaying on a display Semantic Web statements having start properties and stop properties related to lifetimes of said statements, comprising:

displaying subjects and objects of said statements as nodes;

displaying predicates of said statements as arcs connecting said nodes; and

hiding said nodes and said arcs for particular ones of said statements when a selected display timeframe is outside said lifetimes of said particular ones of said statements.

2. (original) The method of claim 1, wherein hiding comprises painting said nodes and arcs for said particular ones of said statements to match a background of said display.

3. (original) The method of claim 1 comprising providing tools for a user to select said timeframe.

4. (original) The method of claim 3, wherein said tools include providing said user with an option to select a start timeframe corresponding to an earliest one of said start properties of said statements.

5. (original) The method of claim 4, wherein said tools include providing said user with an option to select an end timeframe corresponding to a latest one of said stop properties of said statements.

6. (original) The method of claim 5, wherein said tools include providing said user with an option to select at least one timeframe increment for displaying said statements in temporal order corresponding to said start properties and said stop properties of said statements.

7. (original) The method of claim 1, comprising labeling each of said nodes with a value of a literal property of said node dependent on said start property and said stop property of said statement associated with said node.

8. (currently amended) A system for displaying graphical representations of time varying information for Semantic Web structured statements, comprising[[]] :

a processor connected to at least one Semantic Web resource and receiving input from a user, said input including a query to retrieve selected ones of said statements matching said query;

at least one application program interface (API) determining said selected ones of said statements from said at least one Semantic Web structured resource, said API obtaining start and stop properties for subjects, objects, and statements of said selected ones of said matching statements, said API determining graphical representation data from said selected ones of said statements and said properties, said start and stop properties defining lifetimes of said statements; and

a display connected to said processor, said processor receiving said graphical representation data from said at least one API and controlling said display to present graphical representations of said selected ones of said statements said input from said user including a timeframe, said processor controlling said display to hide said graphical representations of determined ones of said statements when said timeframe is outside said lifetimes of said determined ones of said statements.

9. (original) The system of claim 8, further comprising an application tool set operable by said user to input said timeframe, wherein said user can select timeframe increments corresponding to said start properties and said stop properties of said selected ones of said statements.

10. (original) A method of displaying graphical representations of time varying information for Semantic Web structured statements from at least one Semantic Web resource, comprising:
receiving a query to retrieve selected ones of said statements matching said query;
determining said selected ones of said statements from said at least one Semantic Web structured resource;

obtaining start and stop properties for subjects and objects of said selected ones of said statements, said start and stop properties defining lifetimes of said statements;

determining graphical representation data for said selected ones of said statements and said properties;

filtering said graphical representation data to control a display to present graphical representations of said selected ones of said statements; and

controlling the display to hide said graphical representations of determined ones of said statements when lifetimes of said determined ones of said statements exclude a selected timeframe.

11. (original) A computer-readable medium comprising instructions for controlling a processor to associate a lifetime with a Semantic Web structured statement by:

implementing a start property for said statement denoting a start time when said statement becomes valid;

implementing a stop property for said statement denoting a stop time when said statement ceases to be valid, a time interval between said start time and said stop time denoting said lifetime of said statement.

12. (currently amended) The computer-readable medium of claim 11, further comprising instructions for ~~controlling~~ controlling a processor to implement said start property and said stop property as a datatype taken from a listing of XML Schema Datatypes including an xsd:dateTime datatype, an xsd:date datatype and an xsd:gYear datatype.

13. (currently amended) The computer-readable medium of claim 11, further comprising instructions for ~~controlling~~ controlling a processor to display a plurality of said statements on a display by:

displaying subjects and objects of said statements as nodes;

displaying predicates of said statements as arcs connecting said nodes; and hiding said nodes and said arcs for particular ones of said statements when a selected display timeframe is outside said lifetimes of said particular ones of said statements.

14. (original) The computer-readable medium of claim 13, wherein the instructions further comprise instructions for controlling a processor to hide said nodes and said arcs by painting said nodes and said arcs for said particular ones of said statements to match a background of said display.

15. (original) The computer-readable medium of claim 13, wherein the instructions further comprise instructions for controlling a processor to display a toolset operable by a user to select said timeframe.

16. (original) The computer-readable medium of claim 15, wherein the instructions further comprise instructions to control a processor to display a toolset operable by a user to select a start timeframe corresponding to an earliest one of said start properties of said statements.

17. (original) The computer-readable medium of claim 16, wherein the instructions further comprise instructions to control a processor to display a toolset operable by a user to select an end timeframe corresponding to a latest one of said stop properties of said statements.

18. (original) The computer-readable medium of claim 17, wherein the instructions further comprise instructions to control a processor to display a toolset operable by a user to select at least one timeframe increment for displaying said statements in temporal order corresponding to said start properties and said stop properties of said statements.